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Review Article

THE EFFECTIVENESS OF DIRECT AND INDIRECT FEEDBACK ON LEARNERS' WRITING PERFORMANCE ACROSS DIFFERENT GENDER AND CULTURAL BACKGROUND AT HIGHER EDUCATION

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Abstract
The study investigated whether there is any interaction effect or not among gender, learners' cultural background and types of feedback factors in the population mean of writing accuracy. The 111 participants were the L2 writing learners of the third semester students of English study program of IAIN Palangka Raya. The participants were clustered into three groups consisting of two experimental classes: the first treatment class treated using Direct Feedback (n=38), the second treatment class treated using Indirect Feedback (n=37), and one control class did got give feedback (n=36). The data were analyzed using a three way ANOVA. The findings revealed that there was a statistically different effect for the types of feedback (F= 100.857, p= 0.000) and gender (F= 26.688; p=0.000) on the learners' writing accuracy. However, the learners' cultural background (F= 0.347; p=0.708) did not give effect on the learners' writing accuracy. On the contrary, the interaction between: gender and types of feedback (F=2.793, p= 0.066) gender and cultural background (F=0.183, p= 0.833); cultural background and types of feedback (F=0.314, p= 0.868); and among gender, cultural background and types of feedback (F=0.807, p= 0.524) did not give significant effect on the learners' writing accuracy. The findings strengthened the knowledge body by giving a recommendation on how different types of feedback could have different purposes.

Keywords: learners' writing accuracy, Direct Feedback, cultural background and types of feedback

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INTRODUCTION

Despite the fact that giving corrective feedback is still debatable, it is believed that corrective feedback plays an important role in L2 learning process (Goo & Mackey, 2011; Shaofeng Li, 2010; Russell & Spada, 2006; Saito & Lyster, 2012). Specifically, CF allows teachers to give information about the accuracy of learners' production by raising awareness of the grammatical errors of L2 writing. The focus of the study is about direct and indirect written corrective feedback in L2 writing. Ducken (2014) states that written corrective feedback is defined as a kind written feedback made by the EFL teacher in order to improve grammatical accuracy. In my opinion, written corrective feedback is a procedure to give written response to errors made by EFL learners. Corrective feedback is considered as a very important aspect in L2 writing class. Written corrective feedback plays an important aspect to increase writing accuracy (Ferris & Roberts, 2001; Brown, 2007), The present study focuses on two kinds of feedback: direct and indirect corrective feedback. *Direct feedback* is a feedback given to the learners using the correct form done by the language instructors. Direct CF is model of feedback provided by teacher with correct linguistic form (e.g. word, deleted word [s] or morpheme (Ferris, 2002 p. 19). For example: the L2 learner wrote: He *is work hard*. The teacher revised: He *is a hard worker.* In his case, the teacher indicates the location of errors and provides the correct answer. (Ellis, 2008) stated that this type of feedback raises the interaction of the learners in the class. It improves the control of the language since it will not lead the learner to a wrong correction. Ferris (2003) and Bitchener and Knoch (2008) proposed direct and indirect feedback. According to (Ferris, 2003), Direct feedback is a feedback given to the learners using the correct form done by the language instructors. It includes the giving of cross out to the uncorrect words, phrases, or morphemes, the giving of insertion of a missing words, phrases, or morphemes, or providing correct forms directly (Ellis, 2008; Ferris, 2006). In direct CF, the language instructors gave the correct forms of the learners' errors. (Elashri, 2013) argued that direct feedback is useful to learners since it provided learners' errors and revises them directly. This type is more suitable for low learners who cannot correct their errors by themselves (Ferris & Hedgcock, 2005).

On the contrary, Indirect written corrective feedback refers to a procedure of giving feedback that an error has existed but it does not give a correction. In Indirect Corrective Feedback, the teacher gives correction showing that an error exists but does not give the direct correction (Ellis, 2009). According to (Bitchener & Knoch, 2010, p. 209), indirect feedback is a model of feedback in which the teacher showing to the student that there is an error, but not giving with the right form. The teacher may either underline the actual errors or place a notation in the margin indicating that an error. In the pilot study, the students write: I have two book" instead of "I have two books…". The way to correct with Indirect feedback is done by giving clue for error after the word *book* for example: I have two book (plural form). Indirect feedback occurs when the students are informed in some way that an error exists but are not given with the right form. According to (Ferris & Roberts, 2001), indirect feedback is superior for most students. However, the findings of different studies which have focused on the difference between direct and indirect CF are very mixed. Some studies argue that indirect feedback makes learners revise their linguistic errors. However, some suggest the opposite (Chandler, 2003). Moreover, indirect corrective feedback is a feedback indicating that there was a linguistic; however, the teacher did not provide the correct form directly (Ferris, 2003). In this type, language instructors only show the errors but they do not give learners with the correct form (Lee, 2008). For instance, language instructors give signs on the errors by using lines, circles, or codes to show the errors (O'Sullivan & Chambers, 2006), or by giving a cross (Talatifard, 2016). Moser and Jasmine's (2010)

found that learners who were given Indirect CF achieved better than those treated using direct CF. More specifically, Indirect feedback is divided into coded and un-coded feedback. Coded feedback is a type of indirect CF (Ferris, 2002) and it refrerred to identifying errors (Lee, 2004). For example: the L2 learner wrote: I *come* late to the writing class yesterday. The teachers revised by putting (V) above the word 'come' to indicate that the verb is error, and the learner should correct it by himself. The coded feedback is less explicit compared to the pervious type of feedback. The code will function to mark the location of the error and elicit the error to the learners, yet the correct answer of the error will not be provided. The other way to do it is by giving the clue to the learners in order to help them correcting their error. Therefore, the learners will have to correct it by their self. Brown (2012) defined it as the combination of the direct and indirect feedback. However, he also added that the codes/clue should be manageable to not lead the learners to confusion. On the contrary, Un-coded feedback referred to location of errors (Ferris, 2002). In this case, teacher just locates an error by giving cirlce or underline (Lee, 2004). For example: the L2 learner wrote: There are many *book* in my house. The teachers revised by giving underline on the word 'book' to indicate that the word is error, and the learner should correct it by himself. In this case, the teacher underlined: There are many ***book*** in my house. In this case, the teachers will only mark the location of the error without any elicitation. The marking is usually done by highlighting the error (Sheen, 2007). Then, the learners are expected to be able to analyze the error that they made since no clue will be provided.

Studies on the effect of written corrective feedback have been conducted by Farjadnasab, Amir Hossein., & Khodashenas, Mohammad Reza, 2017. They revealed that direct feedback gives facilitative effect on students' writing accuracy. Then, (Amirani, Sara., Ghanbari, Batoul,. & Shamsoddini, Mohammad Reza, 2013) considered to be useful in methodological issues related to writing ability, grammar instruction and error correction techniques. Then, a study by (Jamalinesari, A., Rahimi, F., Gowhary, H., & Azizifar, A, 2015) revealed that the class with indirect feedback improved better than direct feedback. (Kassim, Asiah., & Ng, Lee Luan, 2014) also found that there was no significant difference between the unfocused and focused feedback. In addition, those studies are relevant with the proposed study in giving description on the effect of written corrective feedback in L2 writing; and this study explores the effect of using indirect and indirect feedback in L2 multicultural writing class at English Department of IAIN Palangka Raya 2019/2020 academic year.

The other factor for successful learning in L2 writing class is the learners' cultural background. Hyland (2003) states that cultural factors are reasons for writing differences. Cultural factors formed students' background insights and it influenced their writing performance. Indonesia is the multicultural country. It automatically makes Indonesia becoming a multilingual country. In Indonesia, each culture has its own language and dialect. According to (Brown, 2007), culture is a way of life. In the present study, there are only three ethnic cultural backgrounds being discussed: Javanese, Banjarese, and Dayaknese. In my opinion, the students' cultural background makes the writing differences, and can influence the way of the appropriate feedback. Teachers and students from different cultures may misunderstand their communication in the writing process, which cause ineffective feedback.

This study focuses on the effect of direct and indirect feedback with involving different gender and learners' cultural background as potential factors for successful learning. The novelty of this study is that the learners' gender and cultural background were taken into consideration for deeper analyzing of the effectiveness of corrective feedback in EFL writing class. In this case, the aim is to measure the effect of direct and indirect feedback by considering the gender factors: male and female; and cultural background factors: Dayak, Banjarese, and Javanese. Theoretically, the result of the study can be used as a study of the differences between using direct and indirect corrective feedback and without it. Furthermore, the result of this study may provide new insights in researching writing class, especially in essay writing.

Practically, the study is expected to provide information on trends in EFL writing class. The result of the study is expected to provide empirical data about writing using direct and indirect corrective feedback. In addition, the study can also help the students to solve their problems in generating ideas, reducing grammatical errors when they are writing essay. Through this research, both teachers and students get information about the EFL teaching method in preparing the course syllabus in writing class.

Pedagogically, the result of the study is expected to give pedagogical benefits in learning process in EFL class. For example, it gives a model of students and teacher' plan to provide direct and indirect corrective feedback in L2 writing class. By explaining the effectiveness of direct and indirect corrective feedback in L2 writing class, the teacher can use it as an alternative way to improve the students' writing. Since the result of the study provides the influence of direct and indirect corrective feedback on the students' cultural background, the teacher will be aware of the difference cultural background of the students when he/she gives treatment on direct and indirect corrective feedback to the learners.

Method

The design of the study was an experimental design using factorial design. Experimental Design is a plan for an experiment that specifies what independent variables will be applied, the number of levels of each, how subjects are assigned to groups, and the dependent variable (Ary, 2010, p. 641). The design was appropriate since the study investigates three categorical independent variables, namely: gender (male-female), learners' cultural background (Dayaknese, Banjarese, and Javanese), and types of feedback (Direct Feedback (DF), Indirect Feedback (IF) and No feedback (NF); and one dependent variable: learners' writing score. Since the variables of the study consisted of three categorical independent variables and one dependent variables, the study applied a three Way ANOVA to test the hypotheses. In the present study, the 111 participants were all the essay writing class students of the third semester English department of Palangka Raya State Islamic Institute of 2019/ 2020 academic year.

Procedure

This experiment study attempted to answer the seven research questions. The null hypotheses are: (a) there are no differences in the population mean of writing score due to the types of corrective feedback factor (direct and indirect feedback); (b) there are no differences in the population mean of writing score due to the gender factor; (c) there are no differences in the population mean of writing score due to the learners' cultural background factor; (d) there are no interaction effects between the gender and types of feedback factors in the population mean of writing score; (e) there are no interaction effects between the learners' cultural background and types of feedback factors in the population mean of writing score; (f) there are no interaction effects between the gender and learners' cultural background factors in the population mean of writing score; and (g) there are no interaction effects among gender, learners' cultural background and types of feedback factors in the population mean of writing score. To response the seven research questions; a three-way ANOVA test will be applied. It is used to measure the interaction effect between three independent variables toward a dependent variable. Here, there are three categorical independent variables being investigated, namely: gender (male- female), learners' cultural background (Dayaknese, Banjarese, and Javanese), and types of feedback (Direct Feedback (DF), Indirect Feedback (IF) and No feedback (NF); and one dependent variable: learners' writing score. The scores of the three groups are analyzed with a three-way ANOVA and the outcomes are compared to see the interaction effect of direct and indirect feedback on the students' writing accuracy with involving gender factors (male

and female), learners' cultural background (Dayaknese, Banjarese, and Javanese). All statistical procedures were calculated using SPSS software. To answer the research questions, the participants are divided based on gender (male-female), learners' cultural background (Dayaknese, Banjarese, and Javanese), experiment groups (direct and indirect teacher corrective feedback) and control group (no feedback). Then, they are given pretest to see the early ability on their writing performance. The experiment groups are given treatment using direct and indirect teacher corrective feedback. Meanwhile, the control group is not given treatment. After given treatment, the participants are given post test. The students' writing products are scored using the analytic scoring method covering four components: content, organization, vocabulary, language, and mechanics. Then, the normality of the data was tested using Kolomogorv Smirnov Test; and the homogenity of variance was tested using levene statistics. Those tests were required as the assumption of ANOVA tests. The data of the study were, then, analyzed using a three way ANOVA test provided by SPSS 16 program. Finally, the interpretation of the result from ANOVA test was done.

RESULTS

The ANOVA table gave both between groups and whithin groups, sums of squares, degrees of freedom, and the significant value. If the the significant value for ANOVA test was less than or equal to 0.050, there was a significant difference somewhere among the mean scores on the dependant variables for the groups. On the contrary, if the the significant value for ANOVA test was greater than 0.050, there were no significant difference somewhere among the mean scores on the dependant variables for the groups. The Anova Table was explained in Table 2.

Table 1. The Anova Table of the Students' Writing Score.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	**8915.090[a]**	**17**	**524.417**	**15.289**	**.000**
Intercept	469917.605	1	469917.605	1.370E4	.000
Gender	915.379	1	915.379	26.688	.000
Cultural background	23.778	2	11.889	.347	.708
Types of corrective feedback	6918.660	2	3459.330	100.857	.000
Gender * cultural background	21.090	2	10.545	.307	.736
Gender * types of corrective feedback	191.586	2	95.793	2.793	.066
Cultural background * types of corrective feedback	43.137	4	10.784	.314	.868
Gender * cultural background * types of feedback	110.771	4	27.693	.807	.524
Error	3189.847	93	34.299		
Total	514143.000	111			
Corrected Total	12104.937	110			
a. R Squared = ,736 (Adjusted R Squared = ,688)					

The output above explained that the corrected model was 0.000 < 0.050, it meant that the model was valid. The corrected model explained the influence of gender, cultural background and types of feedback toward learners' writing performance. The output indicated that It meant that the corrected model was 0.000 < 0.050, it meant that the model was valid. The value of intercept was the learners' writing performance , which contributed the performance itself without being influenced by independent variables. The significance value (Sig.) of intercept was 0.000 or less than 0.05. The intercept was significant.

To response the RQ1: "Does the learners' writing accuracy differ significantly caused by types of corrective feedback factor?", the three-way ANOVA table explained the answer. From the output on Table 2, it was seen that the F value of types of teacher corrective feedback was 100.857 and the significance value was 0.000. Since, the significance value was smaller than 0.05, it was said that null hypothesis expressing that there were no differences in the population mean of writing score due to the types of corrective feedback factor was not accepted, and the alternative hypothesis expressing that there were significant differences in the population mean of writing score due to the types of corrective feedback factor could not be rejected. Therefore, it was said that there were significant differences on the learners' writing accuracy caused by types of corrective feedback factor. The mean score of learners' writing accuracy using Direct Teacher Corrective Feedback (DTCF) was 73.27 and using Indirect Teacher Corrective Feedback (ITDF) was 71.59. Meanwhile, the mean score of learners' writing accuracy without using feedback (NF) was 55.19. It was said that the learners' writing accuracy using types of feedback outperformed better than those who did not use feedback in control groups. However, students who received direct feedback performed the similar ability as those who received indirect feedback, as described in Table 3.

Table 2 Types of Corrective Feedback

Types of Corrective Feedback	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Direct Teacher Corrective Feedback	73.265	.983	71.314	75.217
Indirect Teacher Corrective Feedback	71.587	.977	69.647	73.526
no feedback	55.197	1.001	53.210	57.185

To response the RQ2: "Does the learners' writing accuracy differ significantly caused by gender factor?" it was seen on the three-way ANOVA table. From the output on Table 2, it was found that the F value of gender was 26.688 and the significance value was 0.000. Since, the significance value was smaller than 0.05, it was said that null hypothesis expressing that there were no differences in the population mean of writing score due to the gender factor was not accepted, and the alternative hypothesis could not be rejected. Therefore, it was said that gender gave facilitative effect significantly on the learners' writing performance. The mean score of learners' writing accuracy for male was 63.74 and female was 69.63. It was said that, in terms of gender, the learners' writing accuracy differed significantly different between male and female. In this case, female performed better than male on the writing accuracy, as described in Table 4.

Table 3. Gender				
			95% Confidence Interval	
Gender	Mean	Std. Error	Lower Bound	Upper Bound
male	63.740	.859	62.034	65.446
female	69.626	.748	68.140	71.112

To response the RQ3: "Does the learners' writing accuracy differ significantly caused by cultural background factor?" it was seen on the three way ANOVA table. From the output on Table 2, it was found that the F value of cultural background was 0.347 and the significance value was 0.708. Since, the significance value was higher than 0.05, it was said that null hypothesis expressing that there were no differences in the population mean of writing score due to the cultural background factor was not rejected, and the alternative hypothesis could not be accepted. Therefore, it was said that learners' cultural background did not give facilitative effect significantly on the learners' writing accuracy. The mean score of learners' writing accuracy for Dayaknese was 67.06; Banjarese 66.01; and Javanese 66.97. It was said that, in terms of cultural background, the learners' writing accuracy did not differ significantly among Dayaknese, Banjarese and Javanese, as explained in Table 5.

Table 4. cultural background				
			95% Confidence Interval	
cultural background	**Mean**	**Std. Error**	**Lower Bound**	**Upper Bound**
Dayaknese	67.063	1.051	64.975	69.150
Banjarese	66.013	.985	64.057	67.968
Javanese	66.974	.920	65.146	68.801

To response the RQ4: "Are there any significant interaction effects between the gender and types of feedback factors in the population mean of writing score?", it was seen on the three-way ANOVA table. From the output on Table 2, it was found that the F value of gender and types of feedback was 2.793 and the significance value was 0.066. Since, the sig. value was higher than 0.05, it was said that null hypothesis expressing that there were no differences in the population mean of writing score due to gender and the types of corrective feedback factors was not rejected, and the alternative hypothesis was not accepted. Therefore, it was said that there were no differences significantly on the learners' writing accuracy caused by gender and the types of corrective feedback factors. The further detail explanation, as described in Table 6.

Table 6. Gender * Types of Corrective Feedback					
				95% Confidence Interval	
Gender	**Types of Corrective Feedback**	**Mean**	**Std. Error**	**Lower Bound**	**Upper Bound**
male	Direct Teacher Corrective Feedback	69.798	1.503	66.813	72.783
	Indirect Teacher Corrective Feedback	67.311	1.426	64.480	70.142
	no feedback	54.111	1.533	51.067	57.155
female	Direct Teacher Corrective Feedback	76.733	1.266	74.219	79.247
	Indirect Teacher Corrective Feedback	75.862	1.335	73.210	78.514
	no feedback	56.284	1.287	53.728	58.839

To response the RQ5: "Are there any significant interaction effects between the gender and types of feedback factors in the population mean of writing score?", it was seen on the three-way ANOVA table. From the output on Table 2, it was found that the F value of gender and the learners' cultural background was 0.307 and the significance value was 0.736. Since, the sig. value was smaller than 0.05, it was said that null hypothesis expressing that there were no differences in the population mean of writing score due to gender and the learners' cultural background factors was not rejected, and the alternative hypothesis was not accepted. Therefore, it was said that there were no differences significantly on the learners' writing accuracy caused by gender and the learners' cultural background factors. The further detail explanation, as described in Table 7.

Table 7. Gender * cultural background					
				95% Confidence Interval	
Gender	cultural background	Mean	Std. Error	Lower Bound	Upper Bound
male	Dayaknese	64.033	1.574	60.908	67.159
	Banjarese	63.639	1.491	60.678	66.600
	Javanese	63.548	1.393	60.780	66.315
female	Dayaknese	70.092	1.393	67.325	72.859
	Banjarese	68.387	1.287	65.831	70.942
	Javanese	70.399	1.202	68.013	72.786

To response the RQ6: "Are there any significant interaction effects between learners' cultural background and the direct and indirect corrective feedback factors in the population mean of writing score?", it was seen on the three-way ANOVA table. From the output on Table 2, it was found that the F value of cultural background and types of feedback was 0.314 and the significance value was 0.868. Since, the sig. value was higher than 0.05, it was said that null hypothesis expressing that there were no differences in the population mean of writing score due to cultural background and types of corrective feedback factors was not rejected, and the alternative hypothesis was not accepted. Therefore, it was said that there were no differences significantly on the learners' writing accuracy caused by cultural background and types of corrective feedback factors. The further detail explanation, as described in Table 8.

Table 8. cultural background * Types of Corrective Feedback					
				95% Confidence Interval	
cultural background	Types of Corrective Feedback	Mean	Std. Error	Lower Bound	Upper Bound
Dayaknese	Direct Teacher Corrective Feedback	74.571	1.715	71.167	77.976
	Indirect Teacher Corrective Feedback	71.200	1.852	67.522	74.878
	no feedback	55.417	1.890	51.663	59.170
Banjarese	Direct Teacher Corrective Feedback	71.375	1.890	67.621	75.129
	Indirect Teacher Corrective Feedback	71.560	1.629	68.324	74.795
	no feedback	55.104	1.581	51.964	58.245
Javanese	Direct Teacher Corrective Feedback	73.849	1.476	70.919	76.780
	Indirect Teacher Corrective Feedback	72.000	1.581	68.860	75.140
	no feedback	55.071	1.715	51.667	58.476

To response the RQ7: "Are there any significant interaction effects among the gender, learners' cultural background and types of corrective feedback factors in the population mean of writing score?", it was seen on the three-way ANOVA table. From the output on Table 2, the F value of the gender, learners' cultural background and types of corrective feedback was 0.807 and the Sig was 0.524. Since, the sig. value was higher than 0.05, it was said that null hypothesis expressing that there were no differences in the population mean of writing score due to gender, cultural background and the types of corrective feedback factors was not rejected, and the alternative hypothesis was not accepted. Therefore, it was said that there were no differences significantly on the learners' writing accuracy caused by gender, cultural background the types of corrective feedback factors. The further detail explanation, as described in Table 9.

Table 9 Gender * cultural background * Types of Corrective Feedback						
					95% Confidence Interval	
Gender	cultural background	Types of Corrective Feedback	Mean	Std. Error	Lower Bound	Upper Bound
male	Dayaknese	Direct Teacher Corrective Feedback	72.000	2.619	66.799	77.201
		Indirect Teacher Corrective Feedback	65.600	2.619	60.399	70.801
		no feedback	54.500	2.928	48.685	60.315
	Banjarese	Direct Teacher Corrective Feedback	67.250	2.928	61.435	73.065
		Indirect Teacher Corrective Feedback	67.833	2.391	63.085	72.581
		no feedback	55.833	2.391	51.085	60.581
	Javanese	Direct Teacher Corrective Feedback	70.143	2.214	65.747	74.539
		Indirect Teacher Corrective Feedback	68.500	2.391	63.752	73.248
		no feedback	52.000	2.619	46.799	57.201
female	Dayaknese	Direct Teacher Corrective Feedback	77.143	2.214	72.747	81.539
		Indirect Teacher Corrective Feedback	76.800	2.619	71.599	82.001
		no feedback	56.333	2.391	51.585	61.081
	Banjarese	Direct Teacher Corrective Feedback	75.500	2.391	70.752	80.248
		Indirect Teacher Corrective Feedback	75.286	2.214	70.890	79.681
		no feedback	54.375	2.071	50.263	58.487
	Javanese	Direct Teacher Corrective Feedback	77.556	1.952	73.679	81.432
		Indirect Teacher Corrective Feedback	75.500	2.071	71.388	79.612
		no feedback	58.143	2.214	53.747	62.539

To sum up, to see the effect of three independent variables toward a dependent variable was in the following output. The significance value (Sig.) of gender was 0.000 or smaller than 0.05. It meant that gender gave facilitative effect significantly to the learners' writing accuracy. The significance value (Sig.) of Cultural background was 0.708 or greater than 0.05. It meant that Cultural background did not give facilitative effect significantly to the learners' writing accuracy. It meant among Dayaknese, Banjareese, and Javanese learners had the similiar ability on their writing performance. Then, the significance value (Sig.) of types of corrective feedback was0.000 or smaller than 0.05. It meant that types of corrective feedback gave facilitative effect significantly to the learners' writing accuracy. The significance value (Sig.) of Gender and cultural background was 0.736 or greater than 0.05. It meant that Gender and cultural background did not give facilitative effect significantly to the learners' writing accuracy. The significance value (Sig) of Gender and types of corrective feedback was 0.066 or greater than 0.05. It meant that Gender and types of corrective feedback did not give facilitative effect significantly to the learners' writing accuracy. Last, the significance value (Sig.) of Gender, cultural background and types of corrective feedback was 0.524 or greater than 0.05. It meant that Gender, cultural background and types of corrective feedback did not give facilitative effect significantly to the learners' writing accuracy. The next step to interpret the result of three-way ANOVA was to find Post Hoc test. In addition, based on the out put of Tukey Pos hoc test, it could be concluded that: (a) There was a significant difference between writing using Direct teacher corrective feedback and without using Direct teacher corrective feedback on the learners' writing performance. The mean difference was 18.6126 and the significant value was 0.000. It was smaller than 0.05. (b) There was a significant difference between writing using Indirect teacher corrective feedback and without using Indirect teacher corrective feedback on the learners' writing performance. The mean difference was 16.5578 and the significant value was 0.000. It was smaller than 0.05. (c) There was no significant difference between writing using Direct teacher corrective feedback and Indirect teacher corrective feedback on the learners' writing performance. The mean difference was 1.35264 and the significant value was 0.287. It was higher than 0.05. Moreover, The Mean Plots of the students' writing score was explained in Figure 1.

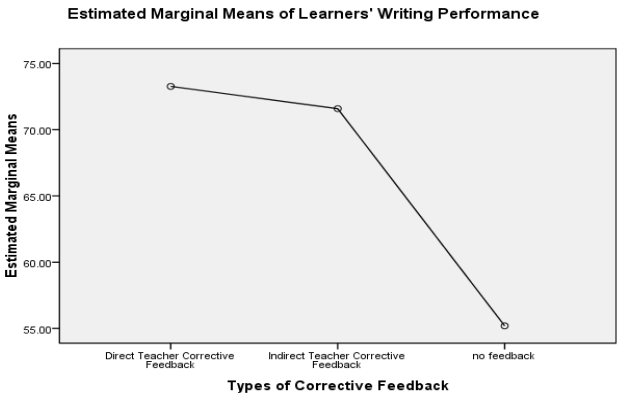

Figure 1.The Mean Plots of the Students' writing score based on Gender, cultural background and types of corrective feedback

Based on the output of Mean plots, it was seen that the mean score, based on gender, of the learners' writing performance: male 63.74 and female 69.63. The mean score, based on learners' cultural background: Dayaknese 67.06, Banjarese 66.03, and Javanese 66.94. The mean score, based on types of feedback given, of the learners' writing performance using Direct Teacher Corrective Feedback was 73.93 (group 1); the mean score of the learners' writing performance using Indirect Teacher Corrective Feedback was 71.91 (group 2); the mean score of the learners' writing performance without using Direct/ Indirect Teacher Corrective Feedback was 55.36 (group 3).

CONCLUSION

To sum up, a three way ANOVA test was conducted to explore the interaction effects among gender, learners' cultural background and types of corrective feedback factors in the population mean of writing score. Based on the out put, it was found that there was no statistically significant difference at the significant value (p- value) was higher than 0.05 level in writing scores for the groups of students (F=0.807, p= 0.524). Based on the output of Mean plots, it was seen that the mean score, based on gender, of the learners' writing performance: male 63.74 and female 69.63. The mean score, based on learners' cultural background, of the learners' writing performance: Dayaknese 67.06, Banjarese 66.03, and Javanese 66.94. The mean score, based on types of feedback given, of the learners' writing performance using Direct Teacher Corrective Feedback was 73.93 (group 1); the mean score of the learners' writing performance using Indirect Teacher Corrective Feedback was 71.91 (group 2); the mean score of the learners' writing performance without using Direct/ Indirect Teacher Corrective Feedback was 55.36 (group 3). Moreover, based on the F value of the compare means in ANOVA Table, it was found that the F value was 0.807. Based on the outcomes, it was also found that the df (Degree of freedom) of the distribution observed was 111-3= 108. Based on the Table of F value, if df was 108, the 1% of significant level of F value was at 3.930 and 5% of significant level of F value was at 2.095 . It could be seen that the empiric F value at 0.807 was smaller than the F value theoretic. Therefore, F table (1%=3.930, 5% 2.095) > F value (0.807) It meant that the F value empiric was smaller than F theoretic at the 1% and 5% significant levels. Based on the results, it could be concluded that at the 1% and 5% significant level, there was a no statistically significant difference on students' writing performance based on gender, cultural background and types of feedback. This meant that Ha stating that there was an interaction effects among gender, learners' cultural background and types of corrective feedback factors in the population mean of writing score was rejected and Ho stating that there was no interaction effects among gender, learners' cultural background and types of corrective feedback factors in the population mean of writing score was accepted. It meant that gender, cultural background and types of feedback did not give significantly effect on the learner' writing accuracy.

DISCUSSION

Based on the research findings, it could be stated that there was a statistically different effect for the types of feedback (F= 100.857, p= 0.000) and gender (F= 26.688; p=0.000) on the learners' writing accuracy. However, the learners' cultural background (F= 0.347; p=0.708) did not give effect on the learners' writing accuracy. On the contrary, the interaction between: gender and types of feedback (F=2.793, p= 0.066) gender and cultural background (F=0.183, p= 0.833); cultural background and types of feedback (F=0.314, p= 0.868); and among gender, cultural background and types of feedback (F=0.807, p= 0.524) did not give significant effect on the learners' writing accuracy.

This study was in accordance with Farjadnasab & Khodashenas, 2017; Amirani, Ghanbari, & Shamsoddini, 2013; Jamalinesari, Rahimi, Gowhary, & Azizifar, 2015; and Kassim & Ng, 2014). (Farjadnasab, Amir Hossein., & Khodashenas, Mohammad Reza, 2017). They revealed that direct feedback gives facilitative effect on students' writing accuracy. Then, (Amirani, Sara., Ghanbari, Batoul,. & Shamsoddini, Mohammad Rza, 2013) considered to be useful in methodological issues related to writing ability, grammar instruction and error correction techniques. This finding was in line with Guénette, (2007). Ferris and Roberts (2001) revealed that there were no differences in the learners' writing performance between the two groups (direct and Indirect Corrective Feedback). This finding was also consistent with Van Beuningan et al. (2012) and Bitchener and Knoch (2010) found a positive impact on both direct and indirect feedback. This finding was also consistent with (Karim, 2013). He confirmed that direct and indirect feedback could increase writing accuracy. The findings also indicated that feedback has the potential to improve grammar accuracy. In addition, Sheen & CF (2010) found that direct feedback gave influence than oral recast in helping learners improve their grammatical accuracy. There was no evidence showing that the oral recast group and the control group made any progress concerning the grammatical accuracy of English articles. This finding was also validated with some researchers (e.g. Bitchener & Knoch, 2010; Elhawwa, 2019; Bitchener, Young, & Cameron, 2005; Sabarun, 2019; Sheen, 2007; and Evans, Hartshorn, and Strong-Krause, 2011). Dealing with gender factors, the result of this study was in line with Sadeghi, Khonbi and Gheitranzadeh (2014). They investigated the effect of gender and type of WCF on Iranian EFL learners' writing. Sadeghi et al. (2014) found gender gave significant on the learners' writing ability with females performing better than males. However, this finding was totally in contrast with Truscott's. Therefore, the finding of the study refuted (Truscott, 2004, 2007, 2009) arguments. To conclude, it was noted that gender and different types of corrective feedback had a vital thing in increasing learners' writing accuracy.

The findings strengthened the knowledge body by giving a recommendation on how different types of feedback could have different purposes. These findings also contributed many ongoing investigations for further researches. For example, what confounding variables involved in the study. In the next research, there was a need to add more variables affecting successful learning such as different gender, learners' learning styles, parents economic status, learners' cultural background, motivation, and preference. The issue of the influence of feedback in writing was so complicated as it involved many variables that could affect its results. The recent investigation was an effort to elaborate on an important issue of feedback. Based on the results, it was advisable for further researchers to conduct researches on feedback in order to aid writing teachers provide more effective feedback on learners' writing.

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REFERENCES

1. ARY, DONALD, LUCY, C.J., CHRIS, S., AND ASGHAR R. (2010). *INTRODUCTION TO RESEARCH IN EDUCATION.(EIGHTH EDITION).(*UNITED STATES: WADSWORTH CENGAGE LEARNING.
2. AMIRANI, SARA., GHANBARI, BATOUL,. & SHAMSODDINI, MOHAMMAD RZA. (2013). THE EFFECT OF WRITTEN CORRECTIVE FEEDBACK ON IRANIAN EFL STUDENTS' WRITING. *PROCEDIA - SOCIAL AND BEHAVIORAL SCIENCES, 83(2007). HTTPS://DOI.ORG/10.1016/J.SBSPRO.2013.06.18*, 1000–1005.
3. BITCHENER, J. (2008). EVIDENCE IN SUPPORT OF WRITTEN CORRECTIVE FEEDBACK. . *JOURNAL OF SECOND LANGUAGE WRITING, 17(2). HTTPS://DOI.ORG/10.1016/J.JSLW.2007.11.004*, 102-118.
4. BITCHENER, J., & FERRIS, D. R. (2012). RESEARCH ON WRITTEN CF IN LANGUAGE CLASSES. *IN WRITTEN CORRECTIVE FEEDBACK IN SECOND LANGUAGE ACQUISITION AND WRITING*, 49–74.
5. BITCHENER, J., & KNOCH, U. (2008). THE VALUE OF WRITTEN CORRECTIVE FEEDBACK FOR MIGRANT AND INTERNATIONAL STUDENTS. *LANGUAGE TEACHING RESEARCH, 12(3). HTTPS://DOI.ORG/10.1177/1362168808089924*, 409–431.
6. BITCHENER, J., & KNOCH, U. (2010). THE CONTRIBUTION OF WRITTEN CORRECTIVE FEEDBACK TO LANGUAGE DEVELOPMENT: A TEN MONTH INVESTIGATION. *APPLIED LINGUISTICS, 31(2) HTTPS://DOI.ORG/10.1093/APPLIN/AMP016*, 193–214.
7. BITCHENER, J., YOUNG, S., & CAMERON, D. (2005). THE EFFECT OF DIFFERENT TYPES OF CORRECTIVE FEEDBACK ON ESL STUDENT WRITING. *JOURNAL OF SECOND LANGUAGE WRITING, 14(3). HTTPS://DOI.ORG/10.1016/J.JSLW.2005.08.001*, 191–205.
8. BROWN, J. (2007). FEEDBACK: THE STUDENT PERSPECTIVE. *RESEARCH IN POST-COMPULSORY EDUCATION, 12(1). HTTPS://DOI.ORG/10.1080/13596740601155363*, 33–51.
9. BROWN, J. D. (2010). CONFERENCE STRUCTURE. *CONFERENCE STRUCTURE*.
10. CHANDLER, J. (2003). THE EFFICACY OF VARIOUS KINDS OF ERROR FEEDBACK FOR IMPROVEMENT IN THE ACCURACY AND FLUENCY OF L2 STUDENT WRITING. *JOURNAL OF SECOND LANGUAGE WRITING, 12(3) HTTPS://DOI.ORG/10.1016/S1060-3743(03)00038-9*, 267–296.
11. DUCKEN, ROY DANIEL. (2014). *WRITTEN CORRECTIVE FEEDBACK IN THE L2 WRITING CLASSROOM.* EWU MASTERS THESIS COLLECTION.
12. ELASHRI, I. (2013). THE IMPACT OF THE DIRECT TEACHER FEEDBACK STRATEGY ON THE EFL SECONDARY STAGE STUDENTS' WRITING PERFORMANCE. (UNPUBLISHED PH.D. DISSERTATION). FACULTY OF EDUCATION, MANSOURA UNIVERSITY, EGYPT.
13. ELHAWWA, T., RUKMINI, D., MUJIYANTO, J., &SUTOPO, D. (2019). EFFECT OF FOCUSED AND UNFOCUSED FEEDBACK ON LEARNERS' WRITING ACCURACY WITHIN DIFFERENT GENDER AND CULTURAL BACKGROUND GROUPS. ARAB WORLD ENGLISH JOURNAL, 10 (3), DOI: HTTPS://DX.DOI.ORG/10.24093/AWEJ/VOL10NO3.27
14. ELLIS, ROD. (2008). A TYPOLOGY OF WRITTEN CORRECTIVE FEEDBACK TYPES. *ELT JOURNAL, 63(2). HTTPS://DOI.ORG/10.1093/ELT/CCN023*, 97–107.
15. EVANS, K. JAMES HARTSHORN & NORMAN W. (2012). THE DIFFERENTIAL EFFECTS OF COMPREHENSIVE CORRECTIVE FEEDBACK ON L2 WRITING ACCURACY. *OURNAL OF LINGUISTICS AND LANGUAGE TEACHING VOLUME 3 ISSUE 2*, 217-248.
16. FARJADNASAB, AMIR HOSSEIN., & KHODASHENAS, MOHAMMAD REZA. (2017). THE EFFECT OF WRITTEN CORRECTIVE FEEDBACK ON EFL STUDENTS' WRITING ACCURACY. *INTERNATIONAL JOURNAL OF RESEARCH IN ENGLISH EDUCATION*, 30–42.
17. FERRIS, D. (2003). *RESPONSE TO STUDENT WRITING: IMPLICATIONS FOR SECOND LANGUAGE STUDENTS.* MAHWAH, NJ: LAWRENCE ERLBAUM ASSOCIATES.
18. FERRIS, D. (2006). DOES ERROR FEEDBACK HELP STUDENT WRITERS? NEW EVIDENCE ON THE SHORT- AND LONG- TERM EFFECTS OF WRITTEN ERROR CORRECTION. *IN FEEDBACK IN SECOND LANGUAGE WRITING : CONTEXTS AND ISSUES. HTTPS://BOOKS.GOOGLE.GR/BOOKS? HL=EL&LR=&ID=XN0KWWNYIOC&OI=FND&PG=PA1&DQ=ERROR+FEEDBACK+IN+L2&OTS=TVBHWC2MCF&SIG=L3CHG7YLI16WB_RSXKODL43BT7U&REDIR_ESC=Y#V=ONEPAGE&Q=ERROR FEEDBACK IN L2&F=FALSE*, 81–100.
19. FERRIS, D. R. (2002). *TREATMENT OF ERROR IN SECOND LANGUAGE WRITING CLASSES.* . ANN ARBOR, MI: UNIVERSITY OF MICHIGAN PRESS.
20. FERRIS, D. R. (2010). SECOND LANGUAGE WRITING RESEARCH AND WRITTEN CORRECTIVE FEEDBACK IN SLA: INTERSECTIONS AND PRACTICAL APPLICATIONS. *STUDIES IN SECOND LANGUAGE ACQUISITION, 32(2). HTTPS://DOI.ORG/10.1017/S0272263109990490*, 181–201.
21. FERRIS, D. R. & HEDGCOCK, J. (2005). *TEACHING ESL COMPOSITION: PURPOSE, PROCESS, AND PRACTICE.* MAHWAH, NJ: ERLBAUM.
22. FERRIS, D., & ROBERTS, B. (2001). ERROR FEEDBACK IN L2 WRITING CLASSES HOW EXPLICIT DOES IT NEED TO BE? *JOURNAL OF SECOND LANGUAGE WRITING, 10(3). HTTPS://DOI.ORG/10.1016/S1060-3743(01)00039-X*, 161–184.
23. FIRESTONE, M. (2010, MARCH SATURDAY). *WHAT IS MULTICULTURAL EDUCATION?* . RETRIEVED FROM HTTPS://STUDY.COM /ACADEMY/ LESSON/ MULTICULTURAL-EDUCATION-DEFINITION-APPROACHES-QUIZ.HTML.
24. HYLAND, F. (2003). FOCUSING ON FORM: STUDENT ENGAGEMENT WITH TEACHER FEEDBACK. *SYSTEM, 31(2). HTTPS://DOI.ORG/10.1016/S0346-251X(03)00021-6.*, 217–230.
25. ISLAM, R., GHANI, A.B.A., ABIDIN, I.S.Z., SUNDARI, A. (2017). EFFECTS OF MINIMUM WAGE RATE TOWARDS THE UNEMPLOYMENT RATE. *JOURNAL OF APPLIED ECONOMIC SCIENCES*, 12 (1), PP. 206-221.
26. GOO, J., & MACKEY, A. (2011). CORRECTIVE FEEDBACK, INDIVIDUAL VARIATION IN COGNITIVE CAPACITIES, AND L2 DEVELOPMENT: RECASTS VS. METALINGUISTIC FEEDBACK. *DEPARTMENT OF LINGUISTICS. HTTP://SEARCH.PROQUEST.COM/DOCVIEW/1018382253?ACCOUNTID=145*.
27. GUÉNETTE, D., & LYSTER, R. (2013). WRITTEN CORRECTIVE FEEDBACK AND ITS CHALLENGES FOR PRE-SERVICE ESL TEACHERS. *CANADIAN MODERN LANGUAGE REVIEW, 69(2). HTTPS://DOI.ORG/10.3138/CMLR.1346*, 129–153.
28. JAMALINESARI, A., RAHIMI, F., GOWHARY, H., & AZIZIFAR, A. (2015). THE EFFECTS OF TEACHER-WRITTEN DIRECT VS. INDIRECT FEEDBACK ON STUDENTS' WRITING. *PROCEDIA - SOCIAL AND BEHAVIORAL SCIENCES, 192. HTTPS://DOI.ORG/10.1016/J.SBSPRO.2015.06.018*, 116–123.
29. JOARDER, M.H.R., SUBHAN, M., GHANI, A.B.A., ISLAM, R. (2015). PAY, SECURITY, SUPPORT AND INTENTION TO QUIT RELATIONSHIP AMONG ACADEMICS IN DEVELOPING ECONOMY. *INVESTMENT MANAGEMENT AND FINANCIAL INNOVATIONS,* 12 (3), PP. 190-199
30. KARIM, KHALED. (2013). THE EFFECTS OF DIRECT AND INDIRECT WRITTEN CORRECTIVE FEEDBACK (CF) ON ENGLISH-AS-A-SECOND- LANGUAGE (ESL) STUDENTS' REVISION ACCURACY AND WRITING SKILLS. *UNIVERSITY OF VICTORIA IN THE DEPARTMENT OF LINGUISTICS*.

31. KASSIM, ASIAH., & NG, LEE LUAN. (2014). INVESTIGATING THE EFFICACY OF FOCUSED AND UNFOCUSED CORRECTIVE FEEDBACK ON THE ACCURATE USE OF PREPOSITIONS IN WRITTEN WORK. *ENGLISH LANGUAGE TEACHING, 7(2). HTTPS://DOI.ORG/10.5539/ELT.V7N2P119*, 119–130.
32. LEE, ICY. (2008). STUDENT REACTIONS TO TEACHER FEEDBACK IN TWO HONG KONG SECONDARY CLASSROOMS. *JOURNAL OF SECOND LANGUAGE WRITING, 17(3)*, 144–164.
33. LEE, ICY. (2014). TEACHERS' REFLECTION ON IMPLEMENTATION OF INNOVATIVE FEEDBACK APPROACHES IN EFL WRITING. *ENGLISH TEACHING, VOL. 69, NO. 1, SPRING 2014*, 23-40.
34. LI, SHAOFENG. (2010). THE EFFECTIVENESS OF CORRECTIVE FEEDBACK IN SLA: A META-ANALYSIS. *LANGUAGE LEARNING RESEARCH CLUB, UNIVERSITY OF MICHIGAN 60:2, JUNE 2010. HTTPS://DOI.ORG/10.1111/J.1467-9922.2010.00561.X*, 309-365.
35. MOSER, M & JASMINE, J. (2010).USING PEER FEEDBACK WITH HIGH SCHOOL STUDENTS TO IMPROVE THE USE OF ANALOGIES AND SYMBOLISM WITHIN CREATIVE WRITING. UNPUBLISHED, MA, THESIS, CALDWELL COLLEGE .1475259.
36. O'SULLIVAN, I., & CHAMBERS, A. (2006). LEARNERS' WRITING SKILLS IN FRENCH CORPUS CONSULTATION AND LEARNER EVALUATION. *JOURNAL OF SECOND LANGUAGE WRITING, 15*,49–68.
37. RUSSELL, JANE., & SPADA, NINA. (2006). THE EFFECTIVENESS OF CORRECTIVE FEEDBACK FOR THE ACQUISITION OF L2 GRAMMAR. UNIVERSITY OF TORONTO.
38. SABARUN (2019) EFFECT OF GENDER AND THE TYPES OF WRITTEN CORRECTIVE FEEDBACK ON THE L2 LEARNERS' WRITING PERFORMANCE. *THE 3RD ENGLISH LANGUAGE AND LITERATURE INTERNATIONAL CONFERENCE (ELLIC) PROCEEDINGS* –VOL. 3,77-85.
39. SADEGHI, K., KHONBI, Z. A., & GHEITARANZADEH, F. THE EFFECT OF TYPE OF CORRECTIVE FEEDBACK (DIRECT VS. INDIRECT) ON IRANIAN PRE-INTERMEDIATE EFL LEARNERS' WRITING. SOCIAL AND BEHAVIORAL SCIENCES *98* (2014), 445 – 452
40. SATO, M., & LYSTER, R. (2012). PEER INTERACTION AND CORRECTIVE FEEDBACK FOR ACCURACY AND FLUENCY DEVELOPMENT. *STUDIES IN SECOND LANGUAGE ACQUISITION, 34(04). HTTPS://DOI.ORG/10.1017/S0272263112000356*, 591–626.
41. SHEEN, Y., WRIGHT, D., & MOLDAWA, A. (2009). DIFFERENTIAL EFFECTS OF FOCUSED AND UNFOCUSED WRITTEN CORRECTION ON THE ACCURATE USE OF GRAMMATICAL FORMS BY ADULT ESL LEARNERS. *SYSTEM, 37(4). HTTPS://DOI.ORG/10.1016/J.SYSTEM.2009.09.002*, 556–569.
42. SHEEN, YOUNGHEE. (2007). THE EFFECT OF FOCUSED WRITTEN CORRECTIVE FEEDBACK AND LANGUAGE APTITUDE ON ESL LEARNERS' ACQUISITION OF ARTICLES. *TESOL QUARTERLY, 41(2). HTTPS://DOI.ORG/10.1002/J.1545-7249.2007.TB00059.X*, 255–283.
43. SMALLEY, L. R. (2008). *REFINING COMPOSITION SKILLS.* HARVARD BUSINESS REVIEW.
44. TALATIFARD, S. (2016). THE EFFECT OF REACTIVE FOCUSED CORRECTIVE FEEDBACK ON IRANIAN EFL LEARNERS' WRITING PERFORMANCE. *JOURNAL OF ADVANCES IN ENGLISH LANGUAGE TEACHING, 4* (3), PP.40-48
45. TRUSCOTT, J. (2009). ARGUMENTS AND APPEARANCES: A RESPONSE TO CHANDLER. *JOURNAL OF SECOND LANGUAGE WRITING*. HTTPS://DOI.ORG/10.1016/J.JSLW.2008.09.001
46. TRUSCOTT, J. (2004). EVIDENCE AND CONJECTURE ON THE EFFECTS OF CORRECTION: A RESPONSE TO CHANDLER. *JOURNAL OF SECOND LANGUAGE WRITING, 13,* 337–343.
47. VAN BEUNINGEN, C. (2010). CORRECTIVE FEEDBACK IN L2 WRITING: THEORETICAL PERSPECTIVES, EMPIRICAL INSIGHTS, AND FUTURE DIRECTIONS. *IJES, 10(2). RETRIEVED FROM WWW.UM.ES/IJES*, 1-27.
48. VAN BEUNINGEN, C. G., DE JONG, N. H., & KUIKEN, F. (2008). THE EFFECT OF DIRECT AND INDIRECT CORRECTIVE FEEDBACK ON L2 LEARNER'S WRITTEN ACCURACY. *ITL - INTERNATIONAL JOURNAL OF APPLIED LINGUISTICS, 156(0). HTTPS://DOI.ORG/10.2143/ITL.156.0.20344*, 279–296.
49. VAN BEUNINGEN, C. G., DE JONG, N. H., & KUIKEN, F. (2012). EVIDENCE ON THE EFFECTIVENESS OF COMPREHENSIVE ERROR CORRECTION IN SECOND LANGUAGE WRITING. *LANGUAGE LEARNING, 62(1). HTTPS://DOI.ORG/10.1111/J.1467-9922.2011.00674.X*, 1-41.